

CLAIMS

What is claimed is:

1. A digital camera, comprising a user interface that allows the specification of an
2 aspect ratio at which to produce a digital photograph taken by the camera, and
wherein the specification of an aspect ratio is accomplished by indicating a
4 standard photographic print format.
2. The digital camera of claim 2, wherein indicating a standard photographic print
2 format comprises selecting a standard photographic print format from a list of
standard photographic print formats.
3. The digital camera of claim 1, further comprising a preview mode, and wherein
2 the camera indicates, during the preview mode, that a portion of a scene viewed
by the camera is outside the specified aspect ratio.
4. The digital camera of claim 3, wherein the camera indicates that a portion of a
2 scene viewed by the camera is outside the specified aspect ratio by displaying that
portion as grayed out in a display of a preview image.
5. The digital camera of claim 3, wherein the camera indicates that a portion of a
2 scene viewed by the camera is outside the specified aspect ratio by displaying that
portion as blacked out in a display of a preview image.
6. The digital camera of claim 3, wherein the camera indicates that a portion of a
2 scene viewed by the camera is outside the specified aspect ratio by displaying, in a
display of a preview image, lines indicating the limits of the specified aspect ratio.

7. The digital camera of claim 1, further comprising a preview mode in which the
2 camera does not display any portion, of a scene that is viewed by the camera, that
is outside the specified aspect ratio.
8. The digital camera of claim 1, wherein the camera crops the digital photograph to
2 the specified aspect ratio, and stores the resulting cropped digital photograph.
9. The digital camera of claim 1, wherein the camera stores the digital photograph at
2 its uncropped size, and stores at least one aspect ratio specification as metadata
with the digital photograph.
- 4 10. The digital camera of claim 9 wherein the digital photograph is stored in a JPEG
2 file, and the aspect ratio specification is stored in an APP segment in the JPEG
file.
11. The digital camera of claim 9 wherein the digital photograph is stored in a JPEG
2 file, and the aspect ratio specification is stored in a comment segment in the JPEG
file.
12. The digital camera of claim 9 wherein the digital photograph is stored in a TIFF
2 file, and the aspect ratio specification is stored in tag data in the TIFF file.
13. The digital camera of claim 1 wherein the aspect ratio specification occurs before
2 the digital photograph is taken.
14. The digital camera of claim 1 wherein the aspect ratio specification occurs after
2 the digital photograph is taken.

15. A digital camera, configured to allow the specification of an arbitrary aspect ratio
2 at which to produce a photograph taken by the camera.
16. The digital camera of claim 15 wherein the arbitrary aspect ratio is specified by a
2 numerical value.
17. The digital camera of claim 15 wherein the arbitrary aspect ratio is specified by
2 specifying a width and a height for the photograph.
18. A digital camera user interface configured to allow a user of the digital camera to
2 specify an aspect ratio at which to produce a photograph taken by the digital
camera, and wherein the aspect ratio is specified by designating a standard
4 photographic print format.
19. The digital camera user interface of claim 18, wherein the user interface presents a
2 list of standard photographic print formats, and the camera user, using user
controls, selects a standard photographic print format from the list.
20. The digital camera user interface of claim 18, further comprising a display, and
2 wherein the display is used to display a preview image, the preview image
containing an indication that a portion of a scene is outside the specified aspect
4 ratio.
21. The digital camera user interface of claim 20, wherein the indication that a portion
2 of a scene is outside the specified aspect ratio is performed by showing that
portion as grayed out in the display.

22. The digital camera user interface of claim 20 wherein the indication that a portion
2 of a scene is outside the specified aspect ratio is performed by showing that
portion as blacked out in the display.
23. The digital camera user interface of claim 20 wherein the indication that a portion
2 of a scene is outside the specified aspect ratio is performed by showing lines
demarking the limits of a scene portion that is within the specified aspect ratio.
24. The digital camera user interface of claim 18 further comprising a display, and
2 wherein the display is used to display a preview image, the preview image not
containing any portion, of a scene viewed by the camera, that is outside the
4 specified aspect ratio.
25. The digital camera user interface of claim 18 wherein the aspect ratio is specified
2 using user controls on the camera.
26. The digital camera user interface of claim 18 wherein the aspect ratio is specified
2 using an external device, and the specified aspect ratio is communicated from the
external device to the camera.
27. A digital camera user interface configured to allow a user of the digital camera to
2 specify an arbitrary aspect ratio at which to produce a photograph taken by the
digital camera.
28. The digital camera user interface of claim 27, wherein the arbitrary aspect ratio is
2 specified by a numerical value.

29. The digital camera user interface of claim 27, wherein the arbitrary aspect ratio is
2 specified by specifying a height and a width for the photograph.
30. A method, comprising specifying, to a digital camera, an aspect ratio at which a
2 photograph taken by the digital camera is to be used, by choosing a standard
photographic print format from a list of standard photographic print formats, the
4 specified aspect ratio taking the value of the aspect ratio of the chosen standard
photographic print format.
31. A method, comprising specifying, to a digital camera, an arbitrary aspect ratio at
2 which a photograph taken by the digital camera is to be used.
32. The method of claim 31, wherein specifying an arbitrary aspect ratio comprises
2 selecting a numerical value for the aspect ratio.
33. The method of claim 31, wherein specifying an arbitrary aspect ratio comprises
2 selecting a width and a length for the photograph.
34. A method, comprising:
2 a) accepting a designation of a standard photographic print format; and
b) using an aspect ratio of the standard photographic print format as a specified
4 aspect ratio at which a digital photograph is to be produced by a digital
camera.
35. The method of claim 34, wherein the designation of a standard photographic print
2 format is accomplished by selecting a standard photographic print format from a
list of standard photographic print formats.

36. The method of claim 34, further comprising:
- 2 a) displaying, on a display on the digital camera, a preview image; and
- b) indicating, in the preview image, a portion of the preview image that is outside
- 4 the specified aspect ratio.
37. The method of claim 36 wherein indicating a portion of the preview image is
- 2 accomplished by showing that portion as grayed out in the display.
38. The method of claim 36 wherein indicating a portion of the preview image is
- 2 accomplished by showing that portion as blacked out in the display.
39. The method of claim 36 wherein indicating a portion of the preview image is
- 2 accomplished by showing lines in the display delimiting that portion of the
- preview image that is outside the specified aspect ratio.
40. The method of claim 34, further comprising:
- 2 a) displaying, on a display on the digital camera, a digital photograph taken by
- the digital camera; and
- 4 b) overlaying, on the digital photograph displayed on the display, a selection
- rectangle having an aspect ratio equal to the specified aspect ratio.
41. The method of claim 40, further comprising accepting directions for moving the
- 2 selection rectangle.
42. The method of claim 40, further comprising accepting directions for resizing the
- 2 selection rectangle.
43. The method of claim 34, further comprising:

- 2 a) storing the digital photograph at its uncropped size; and
b) storing at least one specified aspect ratio as metadata with the digital
4 photograph.

44. The method of claim 43, wherein the digital photograph is stored in a JPEG file,
2 and the specified aspect ratio is stored in an APP segment in the JPEG file.

45. The method of claim 43, wherein the digital photograph is stored in a JPEG file,
2 and the specified aspect ratio is stored in a comment segment in the JPEG file.

46. The method of claim 43, wherein the digital photograph is stored in a TIFF file,
2 and the specified aspect ratio is stored in tag data in the TIFF file.

47. A method, comprising accepting into a digital camera a specification of an
2 arbitrary aspect ratio at which to produce photographs taken by the digital camera.

48. The method of claim 43 wherein the specification of an arbitrary aspect ratio is
2 accomplished by specifying a numerical value for the aspect ratio.

49. The method of claim 43 wherein the specification of an arbitrary aspect ratio is
2 accomplished by specifying a length and a width for a photograph.